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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/644,473

08/20/2003

Reiner Ludwig

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ERICSSON INC.
6300 LEGACY DRIVE
M/S EVR 1-C-11
PLANO, TX 75024

EXAMINER

BOAKYE, ALEXANDER O

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

10/05/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/644,473

Applicant(s)

LUDWIG ET AL.

Examiner

ALEXANDER BOAKYE

Art Unit

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 112-153 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 120-135 and 138-153 is/are allowed.
- 6) ☒ Claim(s) 112, 113, 115, 117-119, 136 and 137 is/are rejected.
- 7) ☒ Claim(s) 114 and 116 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/15/2003.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 112-113, 115, 117-119, 137 ARE rejected under 35 U.S.C. 103(a) as being unpatentable over Gellhaus et al. (US Patent # 6,034,949) in view of Inoue et al. (US Patent # 6,240,514).

Regarding claims 112, 117, 118, Gellhaus teaches communication device (Fig. 1) having a first data structure determined by a first protocol (PRTI), the communication device (Fig. 1) comprising: means for receiving data packets having a second data structure determined by a second protocol (column 2, lines 35-40); means for discriminating (column 2, lines 1-5) between a first type and a second type of received data packets by accessing a predetermined field in the received data packets in which the type of data packet is indicated (column 2, lines 17-32) ; and transmission means (Terminal) for transmitting data packets to a receiving entity, the transmission means

including in each of the transmitted data packets, an indication of the type of data packet (column 2, lines 17-40).

Gellhaus differs from the claimed invention in that Gellhaus does not disclose means for generating data packets having the first data structure by embedding the data packets having the second data structure in at least one of the data packets having the first data structure. However, Inoue reference figure 3, element 46 discloses embedding unit for generating data packets having the first data structure by embedding the data packets having the second data structure in at least one of the data packets having the first data structure (column 10, lines 44-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gellhaus to include the feature of embedding the data packets such as the one taught by the Inoue with motivation being that it provides capability to improve security of the communication system.

Regarding claim 113, Gellhaus teaches that the first protocol is at a first layer in a protocol Suite, and the second protocol is at a second, higher layer in the protocol suite (column 4, lines 57-67).

Regarding claim 115, Gellhaus teaches that the first protocol is a transmission protocol, and the transmission means transmits the generated data packets to a receiving entity over a communication link (column 4, lines 10-15).

Regarding claim 119, Gellhaus teaches that the transmission means includes means for associating each indicated transmission protocol with a transmission reliability mode (column 2, lines 17-40).

Regarding claim 137, Gellhaus teaches in a communication device (Fig.1), a method having a first data structure determined by a first protocol, the method comprising the steps of: receiving data packets having a second data structure determined by a second protocol (column 2,lines 35-40); discriminating between a first type and a second type of received data packets by accessing a predetermined field in the received data packets in which the type of data packet is indicated (column 2,lines 1-5); and transmitting the generated data packets to a receiving entity, wherein each of the transmitted data packets includes an indication of the type of data packet (column --).

Gellhaus differs from the claimed invention in that Gellhaus does not disclose generating data packets having the first data structure by embedding the data packets having the second data structure in at least one of the data packets having the first data structure. However, Inoue reference figure 3, element 46 discloses embedding unit for generating data packets having the first data structure by embedding the data packets having the second data structure in at least one of the data packets having the first data structure (column 10,lines 44-52). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the teachings of Gellhaus to include the feature of embedding the data packets such as the one taught by the Inoue with motivation being it provides capability to improve security of the communication system.

2. Claim 136 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gellhaus et al. (US Patent # 6,034,949) in view of Fisher et al. (US Patent # 5,889,772).

Regarding claim 136, Gellhaus teaches in a communication device, a protocol implementation of a first protocol layer (PRT1, Fig. 1), the first protocol layer being arranged to receive data packets of a second protocol layer (PRT2) that lies above the first protocol layer (PRT1), the protocol implementation of the first protocol layer furthermore being arranged for transmitting the data packets of the first protocol layer on the basis of transmission quality requirements provided by a peer of a protocol layer lying higher than the first protocol layer(column,2, lines 17-40). Gellhaus differs from the claimed invention in that Gellhaus does not teach dynamically adjust an operation mode for transmitting data packets. However, Fisher discloses dynamically adjust an operation mode for transmitting data packets (column 12,line 66-column 13, lines1-5). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Gellhaus to include the feature of dynamically adjusting an operation mode for transmitting data packets such as the one

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taught by Fisher with motivation being that it provides the highest possible throughput for the operating conditions.

Allowable Subject Matter

3. Claims 114, 116 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 120-135 and 138-153 are allowable.

The following is a statement of reasons for the indication of allowable subject matter: As to claims 120-135 and 138-153, the prior art of record does not teach means responsive to the discriminating means, for adjusting an operation mode to match the type of received data packet, wherein the operation mode is associated with one or more of automatic repeat request error recovery, forward error correction, transmission quality, quality of service, transmission priority, and security.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Boakye whose telephone number is (571) 272-3183. The examiner can normally be reached on M-F from 8:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Chi Pham, can be reached on (571) 272-3179. The Fax number is (571) 273-8300.

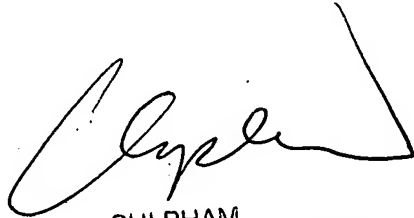
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or PUBLIC PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the **Electronic Business Center (EBC)** numbers at 866-217-9197 and 703-305-3028.

Alexander Boakye

Patent Examiner

AB

9/28/07


CHI PHAM
SUPERVISORY PATENT EXAMINER

10/1/07